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Attorney's Docket No.: 07917-103001 / UMMC 99-45

1626 #24

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Leonard et al.  
Serial No. : 09/894,734  
Filed : June 28, 2001  
Title : NON-NUCLEAR EFFECTS OF THYROID HORMONE

Art Unit : 1626  
Examiner : Unknown

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Commissioner for Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449, copies of which are enclosed.

This statement is being filed before the receipt of a first Office action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050, referencing attorney docket number 07917-103001.

Respectfully submitted,

Date:

January 7, 2002

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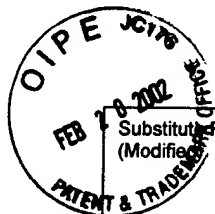
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Kimberly A. Hutchins

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Kimberly A. Hutchins



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U.S. Department of Commerce  
Patent and Trademark Office

Attorney's Docket No.  
07917-103001

Application No.  
09/894,734

**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant  
Leonard et al.

Filing Date  
June 28, 2001

Group Art Unit  
1626

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

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**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

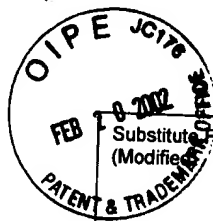
**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AQ	Aufmkolk et al., "Antihormonal Effects of Plant Extracts: Iodothyronine Deiodinase of Rat Liver is Inhibited by Extracts and Secondary Metabolites of Plants," <i>Hormone Metab. Res.</i> 16:188-192 (1984)
	AR	Aufmkolk et al., "Crystal Structure of Phlorizin and the Iodothyronine Deiodinase Inhibitory Activity of Phloretin Analogues," <i>Biochem. Pharmacol.</i> 35:2221-2227 (1986)
	AS	Aufmkolk et al., "Inhibition of Rat Liver Iodothyronine deiodinase," <i>J. Biol. Chem.</i> 261:11623-11630 (1986)

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**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AT	Chassande et al., "Identification of transcripts initiated from an internal promoter in the c-erbA alpha locus that encode inhibitors of retinoic acid receptor-alpha and triiodothyronine receptor activities," <i>Mol. Endocrinol.</i> 11:1278-1290 (1997)
	AU	Cody et al., "Structure-Activity Relationships of Flavonoid Deiodinase Inhibitors and Enzyme Active-Site Models," <i>Prog. Clin. Biol. Res.</i> 213:373-382 (1986)
	AV	Farwell et al., "Identification of a 27-kDa Protein with the Properties of Type II Iodothyronine 5' - Deiodinase in Dibutyl Cyclic AMP-simulated Glial Cells," <i>J. Biol. Chem.</i> 264:20561-20567 (1989)
	AW	Farwell et al., "The actin cytoskeleton mediates the hormonally regulated translocation of type II iodothyronine 5'-deiodinase in astrocytes," <i>J. Biol. Chem.</i> 265:18546-18553 (1990)
	AX	Farwell et al., "Dissociation of Actin Polymerization and Enzyme Inactivation in the Hormonal Regulation of Type II Iodothyronine 5'-Deiodinase Activity in Astrocytes," <i>Endocrinol.</i> 131:721-728 (1992)
	AY	Farwell et al., "Thyroxine targets different pathways of internalization of type II iodothyronine 5'-deiodinase in astrocytes," <i>J. Biol. Chem.</i> 268:5055-5062 (1993)
	AZ	Farwell et al., "Degradation and recycling of the substrate binding subunit of type II iodothyronine 5'-deiodinase in astrocytes," <i>J. Biol. Chem.</i> 271:16369-16374 (1996)
	AAA	Fraichard et al., "The T3Ra gene encoding a thyroid hormone receptor is essential for post-natal development and thyroid hormone production," <i>The EMBO Journal</i> 16:4412-4420 (1997)
	ABB	Gauthier et al., "Different functions for the thyroid hormone receptors TRa and TRb in the control of thyroid hormone production and post-natal development," <i>The EMBO Journal</i> 18:623-631 (1999)
	ACC	Göthe et al., "Mice devoid of all known thyroid hormone receptors are viable but exhibit disorders of the pituitary-thyroid axis, growth, and bone maturation," <i>Genes &amp; Development</i> 13:1329-1341 (1999)
	ADD	Horowitz et al., "Characterization of the domain structure of chick c-erbA by deletion mutation: <i>in vitro</i> translation and cell transfection studies," <i>Mol. Endocrinol.</i> 3:148-156 (1989)
	AEE	Koehle et al., "Rat Liver Iodothyronine Monodeiodinase," <i>J. Biol. Chem.</i> 261:11613-11622 (1986)
	AFF	Koehle et al., "Iodothyronine Deiodinase is Inhibited by Plant Flavonoids," <i>Prog. Clin. Biol. Res.</i> 213:359-371 (1986)
	AGG	Kolodny et al., "Studies of nuclear 3,5,3'-triiodothyronine binding in primary cultures of rat brain," <i>Endocrinology</i> 117:1848-1857 (1985)
	AHH	Leonard et al., "Thyroxine 5'-Deiodinase Activity of Rat Kidney: Observations on Activation by Thiols and Inhibition by Propylthiouracil," <i>Endocrinol.</i> 103:2137-2144 (1978)
	AII	Leonard et al., "Iodothyronine 5'-Deiodinase from Rat Kidney: Substrate Specificity and the 5'-Deiodination of Reverse Triiodothyronine," <i>Endocrinol.</i> 107:1376-1383 (1980)
	AJJ	Leonard et al., "Cerebral cortex responds rapidly to thyroid hormones," <i>Science</i> 214:571-573 (1981)
	AKK	Leonard, "Dibutyl cAMP induction of type II 5'-deiodinase activity in rat brain astrocytes in culture," <i>Biochemical and Biophysical Research Communications</i> 151:1164-1172 (1988)
	ALL	Leonard et al., "Regulation of type II iodothyronine 5'-deiodinase by thyroid hormone. Inhibition of actin polymerization blocks enzyme inactivation in cAMP-stimulated glial cells," <i>Journal of Biological Chemistry</i> 265:940-946 (1990)

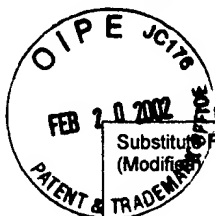
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**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AMM	Leonard et al., "Hormonal regulation of type II iodothyronine deiodinase in the brain," <i>Thyroid Hormone Metabolism: Molecular Biology and Alternate Pathways</i> (War & Visser eds.) CRC Press pages 23-44 (1994)
	ANN	Rabie et al., "Analysis of the mechanisms underlying increased histogenetic cell death in developing cerebellum of the hypothyroid rat: determination of the time required for granule cell death," <i>Brain Res.</i> 190:409-414 (1980)
	AOO	Safran et al., "Structural requirements of iodothyronines for the rapid inactivation and internalization of type II iodothyronine 5'-deiodinase in glial cells," <i>Journal of Biological Chemistry</i> 268:14224-14229 (1993)
	APP	Silva et al., "Regulation of Rat Cerebrocortical and Adenohypophyseal Type II 5'-Deiodinase by Thyroxine, Triiodothyronine, and Reverse Triiodothyronine," <i>Endocrinol.</i> 116:1627-1635 (1985)
	AQQ	Visser et al., "Different pathways of iodothyronine 5'-deiodination in rat cerebral cortex," <i>Biochem. Biophys. Res. Comm.</i> 101:1297-1304 (1981)
	ARR	Visser et al., "Kinetic evidence suggesting two mechanisms for iodothyronine 5'-deiodination in rat cerebral cortex," <i>Proc. Nat. Acad. Sci. USA</i> 79:5080-5084 (1982)
	ASS	Wikström et al., "Abnormal heart rate and body temperature in mice lacking thyroid hormone receptor $\alpha 1$ ," <i>The EMBO Journal</i> 17:455-461 (1998)
	ATT	Xiao et al., "Apoptosis in the developing cerebellum of the thyroid hormone deficient rat," <i>Front. Biosci.</i> 3:a52-57 (1998)
	AUU	

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Substitute Disclosure Form (PTO-1449)